



01/08/01

SPECIFICATION (description and claims)

Title -- Newspaper Box Monitor -- It lets you know when a newspaper is delivered into your newspaper box. It is the same as Provisional Patent Application number 60/179,444, Filing Date -- 02/01/2000, Name of Applicant -- Deane Dorwin McMillen, Willshire, OH. All newspaper companys will furnish a newspaper box at your residence along the road or street, and somebody to deliver a newspaper into your newspaper box (for a price per week) every day that they print the newspaper. The time for delivery will be different because of the weather or printing difficulties. Without something to determine when the newspaper has been delivered you could go outside and look into an empty newspaper box several times (that is no fun in rainy and cold weather). There are schematic diagrams and parts list for each drawing and explanations how the work. A lever, switch and either a visual monitor or a transmitter monitor are installed into an existing company newspaper box. when ever a newspaper is delivered in the newspaper box it will activate the lever switch and turn on the visual monitor or transmitter monitor (which ever one that has been installed in the newspaper box). With a visual monitor installed in the newspaper box, by looking out a window, you would see a light blinking on and off. With a transmitter monitor installed in the newspaper box and a reciever in the house, you would hear a intermittent tone in the house. With a newspaper box monitor you would not waste a lot of time by having to look out a window and watch for the delivery person to drive up and put the newspaper into the newspaper box.

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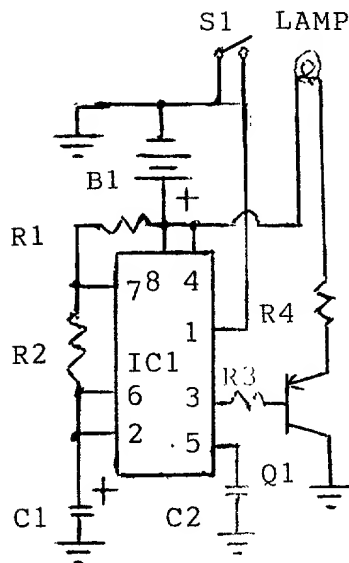
01/08/01

NEWS PAPER BOX MONITOR

Inventor,

PARTS LIST

SCHEMATIC DIAGRAM

VISUALR1-1MEGOHM $\frac{1}{4}$ W 5%R2-33000 $\frac{1}{4}$ W 5%R3- 1000 $\frac{1}{4}$ W 5%R4- 120 $\frac{1}{4}$ W %5

C1-4.7UF ELECTROLYTIC

C2-.05 DISC

IC1-LM555 TIMER

Q1-2N3906 PNP

S1-LEVER SWITCH

LAMP-6V 25MA

9 VOLT-B1

CIRCUIT BOARD

WIRE

PHENOLIC BOARD

ENCLOSURE

HARDWARE

THE IC1 timer/osc, (LM555) is used to time the on-off time of the lamp. timing is done by the values of R1, R2 and C1. The output of IC1, pin 3, is applied to the base of Q1 (2N3906-PNP transistor), which makes the lamp blink on and off. The lamp and wire connection is placed through the hole in the bottom of the news paper box, far enough so that the lamp can be seen at the house. When the paper is delivered the weight of the paper on the phenolic board lever will activate the switch (S1) and put a negative voltage to pin 1 of the IC1 timer, turning it on, and the lamp can be seen blinking on and off at the house.

Date 1-21-00**SALLY E. MILLER**

In and For the State of Ohio
My Commission Expires August 6, 2002

Sally E Miller

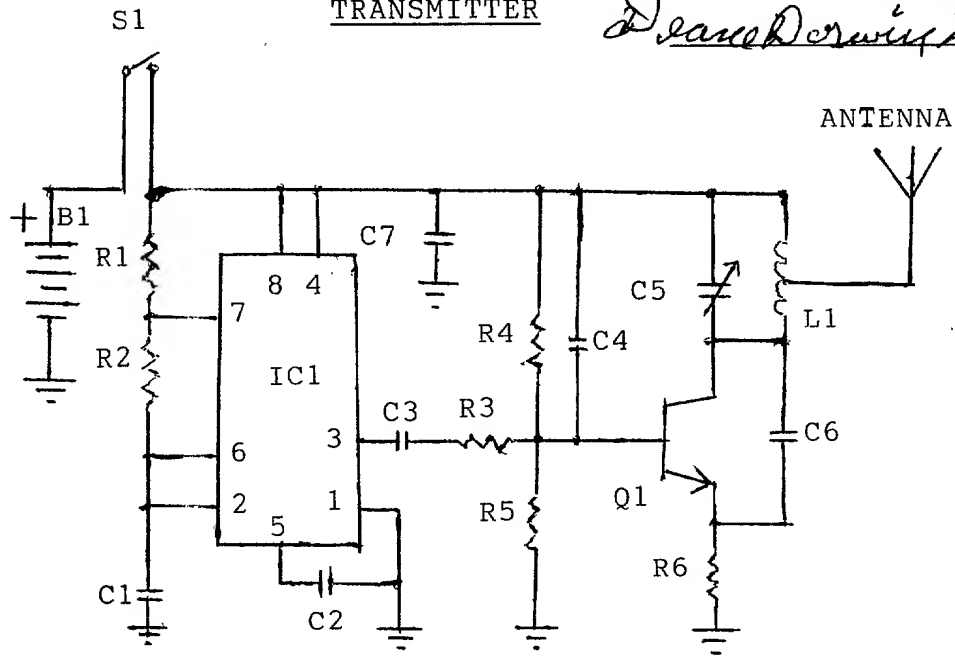
NEWS PAPER BOX MONITOR

SCHEMATIC DIAGRAM

TRANSMITTER

Inventor

Deane D. Miller



PARTS LIST

L1-4 TURNS #22 AWG	S1-LEVER SWITCH	C3-.01 uf DISC
ENAMELED WIRE	(@ RADIO SHACK	C4-.005 UF DISC
1/4" PLASTIC	#275-016	C6-5 PF DISC
FORM-ANTENNA	R1-47000 OHM 1/4W 5%	C7-.1 UF DISC
CENTER TAPPED	R2-10000 OHM 1/4W 5%	B1-9 VOLT
C5-VARIABLE	R3= 240 OHM 1/4W 5%	CIRCUIT BOARD
3PF TO 40PF	R4-10000 OHM 1/4W 5%	PHENOLIC BOARD
(@ RADIO SHACK	R5- 5600 OHM 1/4W 5%	WIRE & HARDWARE
# RSU1191081)	R6- 120 OHM 1/4W 5%	ANTENNA-20" WIRE
IC1-LM555 TIMER	C1-.05 DISC UF	ENCLOSURE(@ RADIO
Q1-2N3904 NPN	C2-.01 DISC UF	SHACK #RSU11340208



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Date 12/1/00

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NEWS PAPER BOX MONITOR

TRANSMITTER

Inventor

Sally E. Miller

The IC1 timer (LM555) is used as an audio signal generator. The audio frequency is determined by the value of R1, R2 and C1. The audio output at pin 3 is applied to the base of Q1 (2n3904) through C3 and R3 and modulates the frequency of the Q1 oscillator. the frequency of Q1 is determined by the value of coil L1 and the variable capacitor C5. By adjusting C5 the frequency can be changed. The antenna wire is center tapped to coil L1. The weight of the news paper on the phenolic board lever, when the paper is delivered, will activate the S1 lever switch and turn on the 9 volt transmitter.

An FM reciever in the house, when tuned to the transmitter frequency, will make an audio tone in the speaker. The transmitter frequency can be changed by adjusting the variable capacitor C5 and should be set on an unused point on the reciever dial in your area.

Date 1-24-00

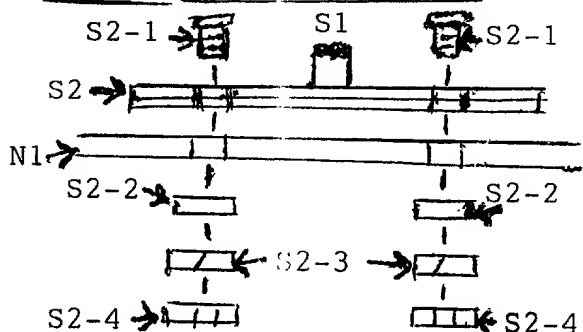
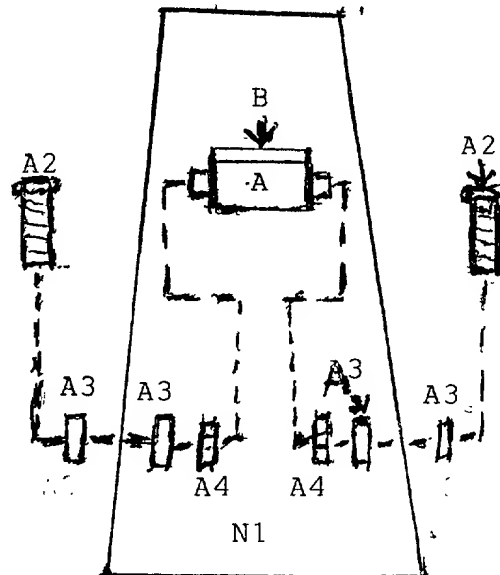
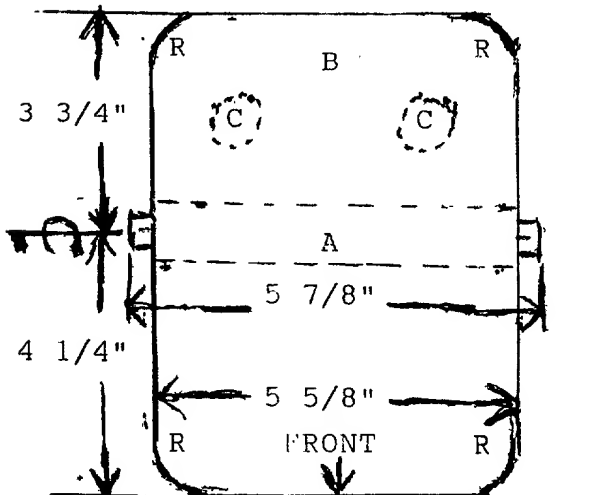
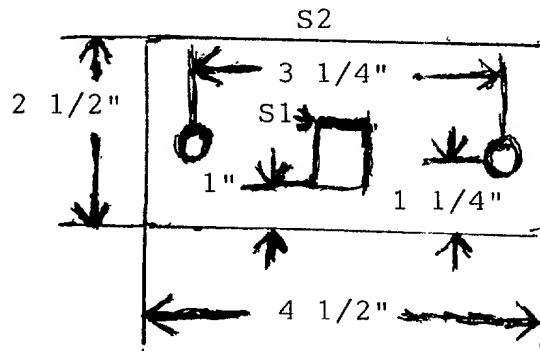
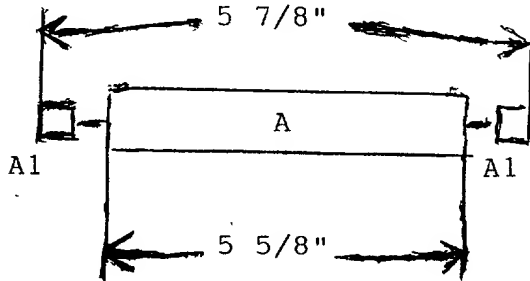
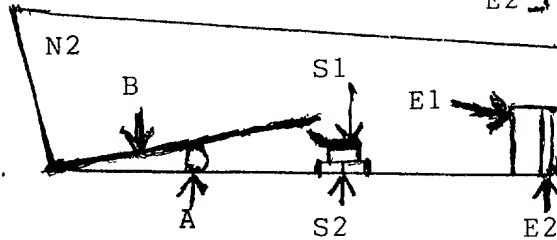
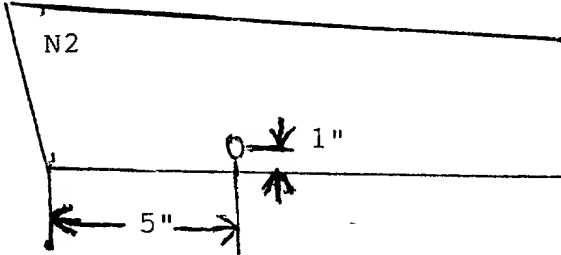
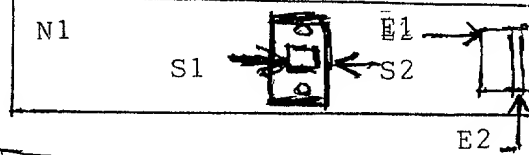
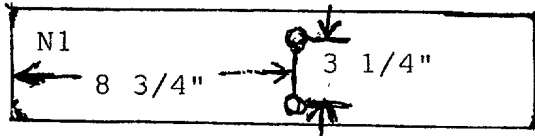


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My Commission Expires August 6, 2002

Sally E Miller

NEWS PAPER BOX MONITOR S1 SWITCH LEVER

Inventor
Donald W. Miller



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My Commission Expires August 6

Date 1-24-00 *Sally E Miller*

NEWS PAPER BOX MONITOR S1 LEVER PARTS LIST

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>NO. REQUIRED</u>
A	3/8" OD polybutylene, 5 5/8" long faucet hookup tube.	1
A1	1" long bearings (#6 spacers) inserted into each end of A with 1/8" sticking out, and epoxied, total length 5 7/8" long.	2
A2	Machine screws #6-32 x 2 1/2" long.	2
A3	Washers #6.	2
A4	Nuts #6.	2
B	Phenolic board with center line of A epoxied where the line meets 3 3/4" and 4 1/4" of Phenolic board. That makes the switch lever.	1
C	2 weights epoxied tp the bottom rear (3 3/4") part of B, to counter balance the switch lever.	2
S2	Phenolic boards with S1 switch epoxied to them.	2
S2-1	Machine screws #6-32 x 1/2" long.	2
S2-2	Washers #6.	2
S2-3	Lock washers #6.	2
S2-4	Nuts #6.	2
E1	Enclosure with visual or FM radio frequency transmitter parts. Every house has an extra FM radio, to be used as a receiver, inside the house.	1
E2	Self stick dual reclosable fastners.	1
S1	Lever switch (@ radio shack #275-016).	1
N1	News paper box bottom. Drill 2 holes with 9/64" drill.	
N2	News paper box sides. Drill both sides with 9/64" drill.	
R	3/8" radius at 4 corners of B switch lever.	

Can be used with multiple news paper boxes by adding a lever B and a S1 switch to each extra box and wiring the S1 switch to the wire in the active news paper box. It will let you know that you have a news paper deliverd, but not in which box.



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Inventor

Date 1-24-00

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Inventor Deane Darwin Miller